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=> s flash chromatography
         54016 FLASH
        307293 CHROMATOGRAPHY
L1         105 FLASH CHROMATOGRAPHY
               (FLASH(W)CHROMATOGRAPHY)

=> s l1 and water
       2312735 WATER
L2           6 L1 AND WATER

=> d 1-6 bib abs
```

L2 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:740207 CAPLUS
TI Purification of synthetic products using **flash chromatography**
AU Ye, Michael; Aurand, Craig; Vitkuske, Dan; Wang, Shaoyin; Nye, Brenda; Caproni, Becky; Singer, Michael
CS Supelco, Bellefonte, PA, 16823, USA
SO Abstracts of Papers, 230th ACS National Meeting, Washington, DC, United States, Aug. 28-Sept. 1, 2005 (2005), ORGN-162 Publisher: American Chemical Society, Washington, D. C.
CODEN: 69HFCL
DT Conference; Meeting Abstract; (computer optical disk)
LA English
AB Flash chromatog. is routinely used for purification of synthetic organic compds. and natural products. It becomes even more popular after introduction of disposable pre-packed flash cartridges, which provide safe, reproducible and economic alternative to in-lab packed glass columns. Because medium pressure is applied to such cartridges, separation is very fast. Samples with low solubility may be introduced on solid support using special solid sample devices. Highly retained compds. may be eluted in a small volume of strong solvent using opposite flow direction. Guard cartridges packed with activated carbon or drying material may be stacked with main cartridge aiming to remove tar or traces of **water** from reaction mixts. Cartridges of different sizes packed with the same sorbent are used in the same system, therefore scale-up becomes quick and easy. In this presentation, we will show practical use of modern flash chromatog. techniques to purify many real life reaction mixts.

L2 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:678735 CAPLUS
DN 137:227819
TI Rapid purification of microcystin-LR using supercritical fluid extraction

and **flash chromatography**
AU Pyo, Dongjin; Lee, Soyoung
CS Department of Chemistry, Kangwon National University, Chunchon, 200-701, S. Korea
SO Analytical Letters (2002), 35(9), 1591-1602
CODEN: ANALBP; ISSN: 0003-2719
PB Marcel Dekker, Inc.
DT Journal
LA English
AB A rapid and efficient method for the extraction and isolation of microcystin-LR from the cyanobacterium is described. The method involves supercrit. fluid extraction (SFE) for the fast extraction and silica gel flash chromatog. for the purification of the microcystin-LR. The microcystin-LR can be successfully extracted with aqueous methanol modified supercrit. carbon dioxide fluid. The procedure results in a purity of up to 95% microcystin-LR with the following preparative HPLC purification steps. The advantage of the method developed here is that the sample handling steps are minimized, thus reducing possible losses of microcystin-LR and saving extraction and purification time.
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:331833 CAPLUS
TI Reversed-phase purification of combinatorial mixtures by parallel **flash chromatography**.
AU Liu, Jack; Ghassemi, Shahnaz; Rahn, Peter C.
CS Biotage, Division of Dyax Corp, Charlottesville, VA, 22902, USA
SO Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000 (2000), MEDI-222 Publisher: American Chemical Society, Washington, D. C.
CODEN: 69CLAC
DT Conference; Meeting Abstract
LA English
AB Rapid growth in parallel synthesis and combinatorial chemical requires improved purification techniques to obtain a high throughput process. This paper shows how parallel flash column chromatog. removes the purification bottleneck by providing purified compds. quickly for either structure-activity relationship (SAR) assay or structure characterization. In this paper, a series of aromatic amides and other structural analogs with potential biol. activity were synthesized by both individual parallel or one-pot synthesis, and purified by using the QUAD3- Parallel Flash Purification System. Reversed-phase (C18) FLASH12M- (12x150mm) cartridges were used to monitor the reactions' completeness and to purify the final products. The purification step was simultaneously performed on 1 to 12 samples in less than 15 min. Structural congeners of one-pot synthesis were separated and purified by using a parallel gradient elution step beginning with 85:15 **water**-acetonitrile to 100% 50:50 acetonitrile-isopropanol in twenty minutes. The purification showed that parallel flash chromatog. is highly reproducible for both isocratic and gradient sepns. The purified compds. demonstrated moderate lipophilicity and will be further evaluated for lead optimization and SAR study.

L2 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:330890 CAPLUS
DN 125:107467
TI Laboratory-scale purification of microcystins using **flash chromatography** and reversed-phase high-performance liquid chromatography
AU Edwards, Christine; Lawton, Linda A.; Coyle, Sadie M.; Ross, Paul
CS Biotage (UK) Ltd., 15, Harforde Court, Foxholes Business Park Hertford, SG13 7NW, UK
SO Journal of Chromatography, A (1996), 734(1), 163-173
CODEN: JCRAEY; ISSN: 0021-9673
PB Elsevier
DT Journal
LA English
AB Microcystins were extracted from 7 L (equivalent to 313 g dry weight) of cyanobacterial scum collected from Rutland **Water** in

Leicestershire, UK in 1989. The resulting aqueous extract was rapidly concentrated on a C18 flash chromatog. cartridge and microcystins were eluted using a step gradient. Fractions were collected manually and monitored by UV spectrophotometer and anal. HPLC. Fractions containing microcystins of similar polarity were pooled to give three fractions. Simple isocratic methods for separating each fraction were developed on an anal. column and scaled up to a 15+7.5 cm I.D. column. Closed-loop recycling was used to maximize yield and purity of two hydrophobic microcystins.

L2 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:141216 CAPLUS
DN 112:141216
TI Purification procedures for synthetic dyes. Part 4. **Flash chromatography**
AU Freeman, Harold S.; Hao, Zhimin; McIntosh, Stanley A.; Posey, James C., Jr.; Hsu, Whei Neen
CS Dep. Text. Eng., Chem. Sci., North Carolina State Univ., Raleigh, NC, 27695-8302, USA
SO Dyes and Pigments (1990), 12(3), 233-42
CODEN: DYPIDX; ISSN: 0143-7208
DT Journal
LA English
AB The title technique offered a rapid procedure for the generation of gram quantities of a disperse dye, provided the dye to be purified was reasonably soluble in ordinary organic solvents such as PhMe, EtOAc, or hexane. The **water**-containing eluents commonly used to develop hydrophilic dyes did not give satisfactory results when silica gel was used, due to strong eluent-adsorbent interactions. The purification of hydrophilic dyes thus required deacivated alumina. The speed with which a purification was accomplished by flash chromatog. often offset the higher amount of solvent required compared with the amts. used in dry column chromatog. and countercurrent chromatog.

L2 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1987:455061 CAPLUS
DN 107:55061
TI Reverse phase **flash chromatography**: a method for the rapid partitioning of natural product extracts
AU Blunt, John W.; Calder, Victoria L.; Fenwick, Graham D.; Lake, Robin J.; McCombs, John D.; Munro, Murray H. G.; Perry, Nigel B.
CS Dep. Chem., Univ. Canterbury, Christchurch, N. Z.
SO Journal of Natural Products (1987), 50(2), 290-2
CODEN: JNPRDF; ISSN: 0163-3864
DT Journal
LA English
AB The application of reversed-phase flash chromatog. to natural products was illustrated by the isolation of the cytotoxic, **water**-soluble sponge pigment, dichorhabdin C. The stationary phase was n-octadecyltrichlorosilane-coated Si gel. Elution with H2O, followed by a steep, stepped gradient through MeOH to CH2Cl2 generally gave very satisfactory partitioning of crude exts. Recovery was usually very good.

```
=> s l1 and water removal
      2312735 WATER
       628661 REMOVAL
         4874 WATER REMOVAL
                (WATER(W)REMOVAL)
L3          0 L1 AND WATER REMOVAL

=> s l1 and water impurity
      2312735 WATER
       156671 IMPURITY
          271 WATER IMPURITY
                (WATER(W)IMPURITY)
L4          0 L1 AND WATER IMPURITY

=>
=> bb
```

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BB IS NOT A RECOGNIZED COMMAND
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=> s l1 and reducing impurities
        334721 REDUCING
        193382 IMPURITIES
           118 REDUCING IMPURITIES
                 (REDUCING(W)IMPURITIES)
L5           0 L1 AND REDUCING IMPURITIES
```